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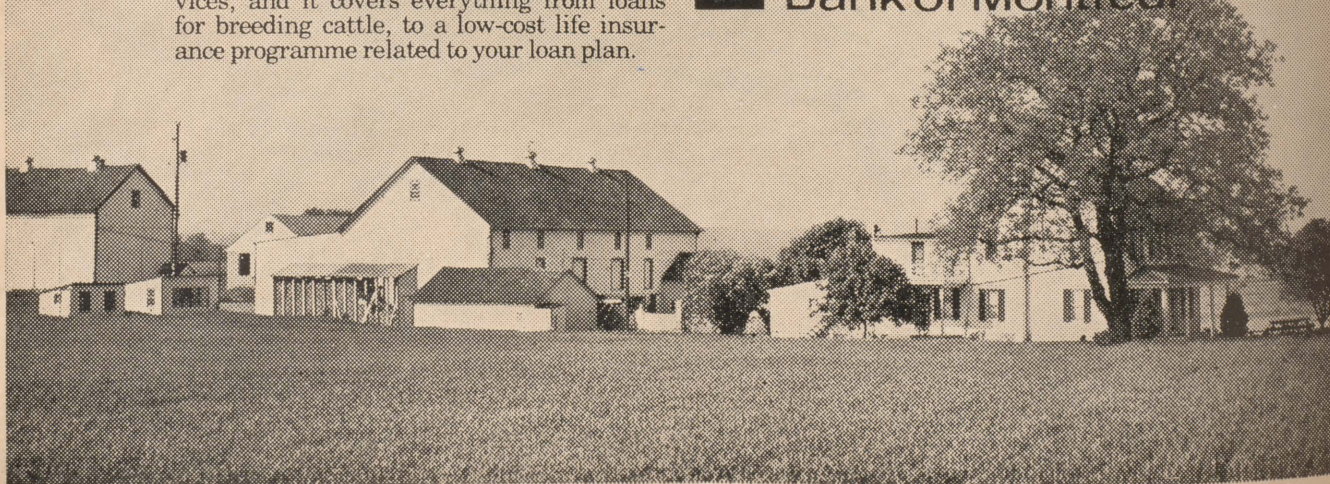
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MARCH 1976

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In This Issue

Steve Tinker, a senior undergraduate student in Wildlife Resources, did the original artwork for our **Cover**. We think it delightful and would like to thank him for letting us reproduce it. See article Page 3.

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JOURNAL JOTTINGS

Most of our readers should be interested in all three of the crops discussed in this issue; all should be interested in at least one of them. The crops are corn, barley, and alfalfa, and each is approached from a different angle. Tremendous losses are incurred each year as a result of blackbird damage to corn. Professor Titman describes the research being carried out in an attempt to find a satisfactory and long-lasting solution to this problem. There is a need for increased acreages in barley in Quebec and Professor Klinck tells us why. He also discusses new varieties and possible future developments. Mr. Roy, of the Quebec Department of Agriculture, zeros in on just about every aspect of growing alfalfa that you can think of — possibly even a few that you hadn't considered.

Since Professor Titman wrote

the article "Blackbirds and Our Corn", there has been one new development. In his article he mentions that the detergent Tergitol, which had been used in the United States, had been banned. The ban has been lifted and the U.S. Army was given permission to use Tergitol at two of their military posts — in Fort Campbell, Kentucky, and Milan, Tennessee. The army maintained that the birds — an estimated 10 million of them — hampered the movement of aircraft, caused damage to crops in the area, and were spreading disease. The latest report stated that 1.5 of the 2 million birds in the Fort Campbell area have been destroyed.

To close on a more cheerful note I would like to wish a belated happy birthday to Mrs. Cameron Dow, O.B.E., of Bonaventure County. Mrs. Dow, who celebrated her 90th birthday on February 28th, was Provincial President of the QWI and National President of FWIC.

Hazel M. Clarke

Can the family farm be preserved? This is a question that has probably been asked, argued over, and worried over by people in agriculture since North America was settled and the family farm came into existence. Well the family farm has survived over the past two hundred or so years in spite of all the predictions that it was doomed. But the type of family farm has changed dramatically over that time. Perhaps it was the fear of losing the type of family farm rather than the family farm itself that has prompted all the worry and discussion.

As anyone familiar with agriculture knows, the "typical" family farm has changed greatly. The small, diversified, family homestead that utilized much labour to produce a wide variety of agricultural products has been largely replaced by larger, more mechanized farm units often producing a few specialized farm products. However, the majority of our larger, more mechanized, and more specialized farms are still family run enterprises.

How much longer can this continue? Are family farms becoming too large and mechanized to be owned and financed by a single farm family? There are some indications that this may be the case. For example, in 1974, the average value of a farm in the United States needed to provide the farm family with an income comparable to nonfarm families was almost \$400,000. More recent estimates put this figure closer to \$600,000. Although these figures are based on the U.S. agricultural situation, there is really no major reason to assume

that it is any different in Canada. Now how many farm boys can start from scratch and expect to become debt-free owners of farms worth a half-million dollars? Will our future farmers become only those who inherit farms or marry into them? And even so, how can one afford to buy out the other heirs at these prices?

Increasingly the capital for this type of high-priced agriculture is being supplied by off-farm sources and this probably has to be as we continue to substitute more machinery for farm labour. In the past, when farms were small and farm people represented one-half of the population, it was conceivable that our agricultural industry could be owned by farm families. But with farm people now constituting only about five per cent of our population, can we expect that such a vast investment be owned, debt-free, by so few people? Probably not.

Various alternatives have been offered to the family farmer to deal with the situation such as long-term rental arrangements, family farm corporations, partnerships, and perpetual debt. But all of these require that the farmer of tomorrow give up some of his independence of being his own boss, of owning his farm debt-free, and of answering to no one. While these alternatives may be unacceptable to some, they probably do indicate the direction the family farm will take in the future if it is to survive.

Gordon Bachman

Blackbirds And Our Corn



by Professor Rodger D. Titman
Wildlife Resources
Department of Renewable
Resources

In North America blackbirds and starlings cause millions of dollars worth of damage annually to grain and fruit crops. The principal grain crops affected are corn and rice. In 1970 estimated total losses of standing corn to blackbirds in the United States were \$9.3 million. Present losses are still higher and the price of corn has almost doubled. Losses of sprouting corn to blackbirds are estimated to equal or exceed the value of standing corn destroyed. Birds damaged an average of 0.16 per cent of the ripening corn in the 25 major corn producing states in 1971 accounting for 6.8 million bushels.¹ Highest individual losses were recorded in New York and Pennsylvania where some growers lost over three bushels per acre.

In Canada blackbirds affect a lot of corn, but we do not have widespread estimates of the damage. Southern Ontario and Quebec comprise the major corn-producing areas. Dr. Alex Cringan, formerly of the Ontario Agricultural College in Guelph, estimated that \$1.5 million worth of corn over 175,000 acres in Kent County, Ontario, near the Lake Erie marshes, was lost to blackbirds in 1964. In our local area, farmers in the Ottawa, Richelieu, and St. Francis River valleys have reported heavy losses.

In standing corn the problem species is the red-winged blackbird. Sometimes associated with flocks of red-wings are cowbirds, grackles or starlings, but these other species rarely occur at corn fields in the large numbers that the red-wings do. Starlings, however, do congregate in large flocks which eat grain from feedlots and damage fruit crops.

The worst damage to standing corn occurs from the time it is in the milk stage until it ripens and hardens. While the blackbirds are breeding in spring and early summer they eat mostly insects. By the time they begin to flock in late July, their diet is primarily vegetative material. The blackbirds begin feeding in earnest on corn after mid-August. Husks are ripped open and grain is removed. The opened husks are also vulnerable to insects and fungal diseases. In one sitting a blackbird usually consumes less than five per cent of the grain per ear. Red-wings move from one cornstalk to the next, stopping to feed at an ear for only a short time. The greater the number of ears opened, the greater the loss of grain per ear. Flocks return to feed at the same sites creating

¹Stone, Mott, Besser and de Grazio. 1972. Bird damage to corn in the United States in 1970. *Wilson Bulletin* 84(1): 101-105.

high localized damage. Growers of sweet corn are more vulnerable to blackbirds because they cannot sell an ear with the slightest bit of damage. Grain and silage corn can be retrieved from damaged ears.

Blackbirds gather together for the night in large communal roosts on willows, cattails, or other firm vegetation near marshes. During the daylight hours they disperse from roosts and return at dusk. Corn-growing areas near roosts appear to suffer the greatest damage. Wherever corn is grown in eastern Canada, marshes accommodating red-winged blackbirds are found in close proximity.

After harvest in the fall blackbirds migrate to the southern United States where they are known to gather in roosts larger than we ever see in the northern portion of their range. There are approximately 70 million starlings, grackles, and other blackbirds roosting in southwestern Kentucky this year. Attempts to reduce numbers in 1975, which were widely publicized in the news media, failed to prevent an increase in the 1976 wintering population. One year ago large roosts were sprayed with a detergent or wetting agent, Tergitol, which reduces the insulative capacity of feathers and causes birds to die of exposure. Approximately 20 per cent of the population in the control area was killed. Tergitol has since been outlawed because of its toxicity to fish and other animals; however, its effect on the blackbird population one year later is hardly noticeable.

Many other attempts have been made to solve the blackbird problem. More than 125 papers have been written on the subject of

blackbird control describing or assessing almost as many methods. A foolproof solution has yet to be found. There are four basic means of protecting corn from blackbirds: (1) habitat manipulation — removing potential bird nesting and roosting locations, and planting bait crops or blackbird resistant crops; (2) dispersing or repelling the birds — involving the use of shotguns, scarecrows, fireworks, exploders, biosonics, aircraft or model aircraft, or chemical repellents; (3) population reduction — shooting, nest destruction, trapping, roost control, or poisoning; (4) birth control — involving the use of chemo-sterilants. Shotguns and carbide exploders are the most commonly used methods of control in Quebec. Shotgun patrols are expensive and time-consuming but if conducted on a regular basis, they are effective. Carbide exploders can be effective if they are placed on platforms and are spaced no more than 600 feet apart to cover approximately 10 acres each. Tests are presently being conducted on a noise-making device called A-V-alarm and on a chemical repellent, Avitrol, which have shown promise elsewhere.

At Macdonald College, Professor Roger Bider and I, with graduate students Marilyn Martin and Bob Clark, began investigations of blackbird depredations on corn in 1975. These studies were supported by the provincial ministry of agriculture and by the federal government. Ms. Martin worked in Beauharnois County where she censused blackbird populations, studied bird movements, and assessed two experimental control techniques. To determine patterns of movement of individual birds, Marilyn attached colourful plastic flagging to their wings

so she could identify them from a distance. Before we can understand how a field of corn is chosen and attacked, it is important to know where birds roost and what routes they follow as they go to feed. If anyone spots one of these marked birds, it would certainly help us to know exactly where and when the bird was sighted, and the colour of the flag it was wearing.

One major roost and three smaller ones were found and monitored south of the Beauharnois canal. Peak numbers observed during the third week of August included approximately 500,000 red-winged blackbirds and 200,000 cowbirds, grackles, and starlings at the major site. The three smaller roosts accounted for about 60,000 birds at their peak.

Corn damage surveys were conducted in 70 fields. Three fields were treated with Avitrol which was intended to repel blackbirds. Our trials did not reveal significant reduction of damage following prescribed treatment with this chemical repellent; however, the small applications may have influenced our results. Reduced damage was recorded in the vicinity of one A-V-alarm unit, particularly near the speakers. This sound emitter disrupts blackbird communication, thus tending to disperse birds (and man, too). Again, though, our results could not be considered conclusive.

During the summer of 1974 corn growers along the Ottawa River between Masson and Thurso suffered heavy damage due to blackbirds. In response to demands by local farmers Colin McNamara and Viateur Pagé and agrologist Art McElroy, a study was initiated in this area under the field direction of Bob Clark. The federal government was un-

The worst damage occurs from the time the corn is in the milk stage until it ripens and hardens.



has been to environmentalists.

Meanwhile, the problem caused by blackbirds in corn has not been solved. Control has not been achieved in many cases because farmers are unaware of the methods available to them or because techniques have been used improperly (for example, carbide cannons have been placed on the ground instead of above the crop and spaced too far apart). More complications arise when birds are scared from one field to adjacent ones. Sometimes it is worthwhile to perform time-consuming or expensive control methods, such as nest destruction or shotgun patrols, and on other occasions it is not worthwhile. Under 1975 conditions in the Masson area, control methods costing up to \$0.50 to remove one bird would have equalized losses incurred. Widespread and proper use of Avitrol in this same area would have cost \$0.25 per bird scared away if the chemical was totally successful. Studies in other areas have shown that birds eat as little as \$0.07 worth of corn per season. In the latter case, extremely efficient control costing less than \$0.07 per bird prevented from eating corn would be necessary to make the control economically acceptable. Many variables must be considered in assessing the economic efficiency of a potential control method. These variables may change within a given area from one year to the next, so the problem is complex.

This year we hope to devote our efforts to testing the effectiveness of large scale trapping in controlling birds and also to observing bird movements as they relate to damage patterns. Our aim is to help corn growers effectively reduce crop damage caused by blackbirds, at least to a level which is economically tolerable to them.

willing to sponsor immediate and direct control measures against blackbirds before an accurate and detailed account of conditions was recorded. Thus assessments were made of present conditions and the history of corn growth and blackbird levels and damage near Masson. In 1975 all agreed that the pressure from blackbirds was much reduced in comparison to the previous three years. The peak roosting population, comprising mostly locally-produced birds, was close to 18,000 red-winged blackbirds. Damage last year was therefore relatively low. Further up the river, however, corn growers near Shawville were not so fortunate. They were invaded by more blackbirds than they had ever been accustomed to.

A further important aspect of our Masson study was an examination of attitudes toward the control

of pest animals. Environmentally conscious people from the country, suburbs, and city were asked to complete a questionnaire intended to evaluate these views. Our governments, as they should be, are extremely sensitive to people's opinions about killing animals. Their support of pest control programs therefore reflects the desires of their constituents. Although people interested in the environment do not like to see animals killed, their feelings are greatly modified by the economic and recreative values of the killing. Our survey showed that hunting blackbirds and controlling them in agricultural areas is as acceptable to those sampled as hunting small game or ducks. There was no indication that controlling blackbirds in crops would become an issue such as killing robins in blueberries or killing seal pups

BARLEY UPDATE

(An interview with Dr. H. R. Klinck of the Agronomy Department. Asking the questions were Joan Habel and Hazel M. Clarke.)

Hazel Clarke: Do you feel that barley is a better feed crop than oats?

Professor Klinck: I'm reluctant to admit that it is because I prefer oats in many ways; nevertheless barley is a better feed crop than oats mainly because it is a higher energy feed than oats and lower in fibre. Barley only runs about five per cent fibre compared to around 11 per cent for oats on the average. This, of course, is tied in with the energy value. When these cereals are grown for livestock feed, they are being grown as a source of energy; so that to the extent that there is more energy in a pound of barley than in a pound of oats, it is a better feed. It is more economical from the standpoint of the production of meat, milk, and eggs.

Joan Habel: Could you tell us a little about the difference between protein values in barley and oats?

Professor Klinck: Actually if you look at protein quantity in these two crops there isn't a great deal of difference — about half of one per cent. Barley in Quebec will average about 11 per cent protein. Mind you, we are talking about averages and it can vary all the way from nine per cent to 12 or 12½ per cent, depending on the season. In a very dry season you are going to have higher protein. On the average it is about 11 per cent in eastern Canada whereas oats

protein content would be about 10 per cent on the average. Barley is slightly higher. Protein, of course, isn't the only thing. We mentioned energy before, and I always think that the total digestible nutrients or a number of different feed quality measurements that are used are really more meaningful than just the protein. I can give you some specific figures for digestible energy, for example, expressed as kilocalories per kilogram — barley for cattle feeding runs about 3,260 kilocalories per kilogram whereas oats for cattle is about 2,980, so this is quite a difference. If you want to compare them for pigs, which is a slightly different base, then the relative figures are 3,080 for barley and 2,860 for oats. So barley has the edge on oats in this respect. One of the difficulties in looking at average figures between crops like barley and oats is the fact that you do have tremendous differences among varieties, particularly in oats because of the percentage of hull. The percentage of hull in oats can range from 20 to 35 per cent depending largely on variety, and this is reflected in the energy content. Energy content is related to fat content, and one of the aspects of our oat breeding program is the selection of varieties with higher fat content in order to increase the energy content of oats. What we are really trying to do, if you like, is to make a barley out of oats from a feed standpoint. We're a long way from it, but we're looking at this.

Joan Habel: At the present time, therefore, in a bushel of barley we get more energy than in a bushel of oats. What would be the difference in yield per acre?

Professor Klinck: This raises the whole question of comparisons, because when you say a bushel of barley you are talking about 48 pounds, and when you say a bushel of oats you are talking about 34 pounds. Obviously there is more energy in 48 pounds than in 34; nevertheless the bushel is the common measurement that the farmer is familiar with and we worked out some figures a couple of years ago on this. The comparison, if I remember correctly, was about 30 bushels of barley to 50 bushels of oats for the same amount of energy, taking into consideration the differences in bushel weight and the differences in energy per pound. Average yields, of course, are very low — plus or minus a few bushels, around 40, but that is very unreal as far as a good farmer is concerned. A good farmer should be able to get 60 bushels of barley and with a little effort he should be able to get 80. He should easily be able to get 70 bushels of oats and with a little effort he should be able to get 90. Generally, a good farmer can get more energy off an acre of barley than he can off an acre of oats, if he has the right growing conditions.

Hazel Clarke: Is barley more difficult to grow?

Professor Klinck: It's more difficult to grow in the sense that it is more particular, more specific, in its requirements than oats. If you look at the figures for production in Quebec, historically, you'll find that oats has always predominated by 10 — 15 — 20 times. For a long time we were up around one million acres of oats against 15 — 20 thousand acres of barley. At present oats

has decreased a bit and we are down around 700 thousand acres, and barley is on the upswing at around 50 thousand acres. They are still a long way apart, and the reason for this is the differences in their ability to grow. We have so many soils in this province that are poorly drained and are not properly fertilized, and barley needs good drainage and good fertility. A farmer can produce oats almost anywhere and get a reasonable crop, not a good crop necessarily, but a reasonable crop, but he is in real trouble with barley in a poor field. There definitely is a difference here in their adaptation and barley is much more difficult to handle because of this. However, with the promotion that the government is giving to barley as a feed grain, I would expect that the acreage will come close to doubling within the next 5 to 10 years.

Hazel Clarke: What about our weather?

Professor Klinck: Quebec weather usually is pretty ideal for both. There is not too much difference in their reaction to weather, although barley has a bit of an edge on oats if we get high temperatures and dry conditions during July when the grain is filling. These conditions seem to affect the filling of the oat kernel more than barley, so that barley can grow a little better in most years in this respect than oats will. A really cool, moist season is best for oats, but the warmer weather and drier conditions don't affect barley to quite the same extent.

Hazel Clarke: What about diseases?

Professor Klinck: Smut is one of the big problems unless the seed is properly treated. We have chemicals such as vita-flow, which is the most common one, that will control loose smut, and there are other chemicals that will

control some of the other smuts — covered smut, false loose smut, and so on. Vita-flow is the only systemic one and is effective in the control of loose smut which is the worst one.

We have heard quite a bit in recent years about a virus called barley yellow dwarf. This affects barley by stunting the plants and turning the leaves yellow. It's a virus which is in the juices of the plant and is transmitted from plant to plant by aphids. The aphid sucks the plant, picks up this virus and then spreads around and multiplies. The virus moves with the generations and you get patches of this barley yellow dwarf disease developing in the field. I never thought it was particularly serious but a pathologist working now at the Canada Department of Agriculture research station at St. Foy has been concentrating on this area of research and evidently the disease is much more serious through the province than we had thought. The problem with this one is you have to live with it, because there is no economical way of controlling it. There are no parental varieties that are resistant to it, although there is some evidence that certain varieties are a little more tolerant. This may well become more of a problem as we increase barley production in the province.

Joan Habel: Could you tell us something about the relatively new variety Loyola and about the more recent Laurier?

Professor Klinck: Loyola, as you know, was released from this department in 1973. We have had a system in the release of new varieties in operation for a number of years where, rather than just releasing the seed to the general public and letting it find its own way, we have made an agreement with a private seed company for the initial multiplication, the marketing, and the distribution of the variety. The company gets

all the initial seed under a contractual arrangement, and they then are in a position to do some publicity and be the ones who can reap the benefits from their investment. The result of all of this is a certain royalty payment that we get back into the department for further research and breeding work. Loyola was released through the Co-op Fédérée who, in turn, contracted with seed growers in the province for the multiplication of this variety. I can't give you actual figures, but I think they had something in the order of 20,000 hundred-weights of certified seed available for market in the spring of 1975, which was a pretty good start on the variety.

Loyola was released because of its yielding capacity, straw strength, and lodging resistance. It was designed to replace Champlain, which is the variety we put out in 1962 under a similar arrangement we made with Maple Leaf Mills. After a variety has been around for seven or eight years people begin to look for something new or better. If you are running a plant breeding program, you should be able to come up with something better every six to seven years. So Loyola was an improvement on Champlain in these respects and this was the main reason for putting it out — more production for the farmers.

Now Laurier is another step which came unexpectedly. A plant breeder works along in hopes that something will happen but it's a chancy game. Once in a while you get a real surprise and this is the case with Laurier. It showed up in the last couple of years as being a really superior variety, even to Loyola, which we thought was pretty good. We couldn't avoid releasing this one in the spring of 1975, and we put out tenders for its production. Out of four or five bids we finally released it to Stewart Seeds in Ontario on an exclusive basis.

They were very interested in it because of its yielding ability and potential particularly for eastern Ontario, Quebec, and the Maritimes. Our varieties don't normally perform too well in western Ontario, and generally they are no good in western Canada, but eastern Ontario has a climate similar to our own and so our varieties do seem to be adapted to this area. Laurier, in two years of testing in the province, was yielding eight per cent above Loyola in controlled tests, which is quite significant, and it has the additional advantage of being resistant to loose smut. As we only had six bushels to release last spring, it's going to take one or two years to get it to multiply to the point where it will be readily available to farmers, but the people who have the variety are planning, I believe, to do some winter increasing and boost it up a little quicker this way.

Hazel Clarke: Are there any other varieties?

Professor Klinck: There are no other varieties that are currently of interest, but one can never talk about barley at Macdonald College, without going back to Montcalm which was released by Professor Lods in 1945. It became the most widely grown malting barley not only in Canada but also to quite an extent in North America during the late forties and early fifties. It was finally replaced by better varieties from western Canada, but Macdonald College became famous because of Montcalm over 20 years ago and we have, of course, new things in the works now.

If I may digress just a little for a moment, I'm rather excited about a completely new approach that we introduced a few years ago in developing what we refer to as a unicum barley, which means a barley that produces only one stock and is not able

to send up any tillers. The theory behind the development of unicum was that when ordinary barleys are planted they tend to tiller or stool out and a lot of their tillers are not only late but also a lot of them don't even produce heads. This is fine if you are going to cut it for forage or use it for pasture, but if you are looking for maximum grain yield, then you can't get it by having a lot of stocks with no heads, or with very small heads. The corn people faced up to this many years ago and many of the best grain corn varieties are single stocked with one or two very large ears. It was with this sort of pattern in mind that we developed a unicum type, and we are working toward a single stock with a huge head. I don't know how big we can get them — we have a long way to go. The rather interesting and encouraging thing about it is that in the test across eastern Canada last year the unicum selection that we put in in comparison with all the best varieties was equalled in yield to the best check varieties. This was extremely encouraging and unexpected because surely the tillers do, in fact, produce some grain. I think, however, that the heads on the unicum were just enough larger that even though there weren't quite as many stocks per square foot, it was able to compete. A great many people are quite excited about this; I have had many requests for seed from other plant breeders, and it is creating quite a stir among barley breeders. Whether it will ever become a practical variety remains to be seen, but to extend this a little further, I can see the day when we have a good unicum barley and can go to precision planting with accurate spacing of the plants in the field. We could then think in terms of one half million to three quarter million plants per acre as they talk about 20,000 plants per acre in corn. It's something for the future, but

it's kind of exciting.

In addition to this, we also have three or four hybrids in the advanced stages of testing. They are showing up quite well but we won't know for certain for at least another two years.

Joan Habel: If a farmer is not raising barley for his own livestock, is there a good cash crop market for feed and malting barley?

Professor Klinck: I suspect that there is a good cash crop market for barley as feed. Any barley can be fed, but there are specific varieties that are only suitable for malting. As far as malting barley is concerned, the picture is a little different, if we are talking about Quebec in particular. As it's more economical to produce malting barley on a large scale and ship it to the plant, practically all of the malting barley that is processed in Montreal is moved in from the prairies. The malting companies claim that if a farmer comes in with a load of malting barley that he wants to sell to them, they will buy it, but they do so reluctantly. I don't think they offer him a very big price for it because it is a nuisance to them. The malting process itself involves batch runs of specific varieties or specific blends of at least three thousand bushels and often six thousand bushels which a cash crop farmer here simply doesn't have. He may have 25 acres and gets 40 bushels an acre.

Hazel Clarke: Any concluding thoughts?

Professor Klinck: I would like to say that I am very much behind the kind of promotion that the provincial government is doing in trying to increase the acreage and the production of barley in this province. There is a real need for double the acreage that we have now of high energy feed such as barley.

Our Readers Write

Blair Farm

In Your December 1975 — January 1976 issue of the Macdonald Journal you published an article by Professor A.R.C. Jones entitled "A Man and His Visions", which concerned the late Roy Blair's gift of his land to Macdonald College. As president of the Chateaugay Valley Historical Society, I feel that certain points of that article need to be corrected or clarified.

When Professor Jones listed Roy Blair's interests, he might have added local history. Roy was one of the founders and a long-time director of our Society. His continued interest led him to offer the use of a portion of his house and barn to the Society as museum facilities as of July 1, 1968. In July of 1969, following the expenditure of a large part of our rather meagre funds and a great deal of effort by our museum committee, "Blair House", as it was called, was opened to the public with Roy Blair acting as our curator and guide. The following year a larger area of the barn was made available to our use, and direction signs to Blair House were erected at several key intersections in the area. Our museum committee had done some work on both the house and barn during this period. The portion of the house opened to the public had a thorough cleaning and new wallpaper gave the desired visual touch. The stable area received a good cleaning and was whitewashed at our expense. From July 1968 until Roy's death in 1973 the only maintenance done to any of the Blair property was either done by us or at our expense. This included

the removal of some of the dead trees around the buildings and the cutting of the grass and hay from this same area each year.

The heavy snows of the winter of 1971 caused the collapse of the summer kitchen and woodshed at Roy's place, and the small woodshed shown in Professor Jones's pictures was built under our direction from salvaged material. I am sure that the work and expense undertaken by the Society during this period — 1968-1973 — and the obvious pleasure that Roy had in showing guests around and asking them to sign our guest book in ever-increasing numbers until his death should have received a more positive comment from Professor Jones than "The Society had been using the buildings . . . just prior to Roy Blair's death."

According to the fourth clause of his will, Roy bequeathed all of his "property, real and personal, movable and immovable to Macdonald College", with the request that some sort of an agricultural program having to do with the problems of the marginal land farmer in southern Quebec be instituted. While Roy's will gave the College various options, his purchase of the additional 285 arpents cited by Professor Jones was to provide more marginal land for his hoped for program. The fifth clause, added at a later date, bequeathed the farm to the Chateaugay Valley Historical Society should Macdonald be unable to accept the gift subject to the obligations of the will, and further charged the executor to see that the Society would have the use of the house and

barns at an annual fee of one dollar if they were being used and were needed as a museum complex at the time of his death.

On May 9, 1974, at the Howick Town Hall, our museum committee met with three guests: the executor of the will, Dean Blackwood, and Professor Jones of Macdonald. I feel that a very frank discussion concerning the aspirations and problems of both parties took place that evening. The gentlemen from Macdonald put forward preliminary plans for the Blair farm, and some of our members questioned whether these plans were not deviating too far from the spirit of Roy's will. Professor Jones also expressed the point that Macdonald felt that their use of the house was an essential part of their plans, while some doubt was expressed by our side as to whether we could afford to properly repair and maintain the house.

We offered a compromise proposal whereby each party would have a portion of the house, with Macdonald adding a wing if they felt that they needed more space for their purposes. This idea was flatly rejected, and the meeting ended with our promise to study all of the points raised during the evening.

At a museum committee meeting held near the end of May, it was quite obvious that the Society was sympathetic to the Macdonald College proposals for the Blair farm, even though there was still the question as to the spirit of Roy's will and the fact that

we would have to relinquish our rental privileges to the Blair house to help ensure Macdonald's success of the larger project. A motion was drafted that night, and was subsequently rewritten to state our position in the clearest possible terms. Our position was that the proposals put forward by Macdonald "merited the full support of the (museum) committee, the Society, and the community at large as presenting the possibility of very worthwhile educational, agricultural, and recreational facilities and advantages to the entire Chateaugay Valley region."

Our motion offered to give up our rights to the house coupled to the following recommendations:

— that we proceed with plans for an agricultural museum at the site (in the barn) as "an integral and complementary part of the overall plans;

— that we retain "our privileges to the barn and out-buildings" for "the designated \$1 per year" with any changes to this position subject to negotiations;

— since this arrangement would leave us without facilities for a general museum and historical records repository, we asked in return from Macdonald College that:

1) two members of the board that Macdonald had proposed to administer the Blair project be from the Historical Society. This Board, as we understood it, was to be made up of representatives of Macdonald College and re-

presentatives of most local agricultural groups;

2) we be provided with a cash settlement, of an unspecified amount, "to help the Society establish its needed museum and records repository elsewhere";

3) we be given first option to purchase the Blair property should Macdonald decide to terminate the project at any time after the initial 10-year period of this project as stipulated by Roy's will.

We felt that our proposals sent to Macdonald on July 5, 1974, were worded in such a manner as to leave an open door to negotiations on any point or points that Macdonald might desire.

While we have received some superficial communications from time to time, as of this date we still have yet to receive an official reply to our proposals concerning our relinquishment of Blair House. As the College had received the deeds to the property in the spring of 1975, we recently sent Macdonald College a cheque for two dollars for two years' rental of the house and barns of the Blair Farm in accordance to the terms of Roy Blair's will, thus assuring our rental privileges until the spring of 1977.

Professor Jones wrote in his article that the Society "graciously withdrew their claim on the house." We have not withdrawn our claim; however, we have

offered to do so — and I hope that we have done so graciously — subject to the settlement of the points covered in our motion sent to Macdonald. I cannot understand the delay in offering some sort of official reply to our proposals and can only conclude that there has been a breakdown of communications within the Macdonald College Committee, within the McGill Board of Governors, or somewhere between these two groups.

As far as we can ascertain, there has never been a meeting of the proposed Administrative Board. As one of this body's functions seems to have been to help the Blair project become part of the community at large, and, in turn, to direct the project so that it could be a worthwhile addition to our community, it would seem that the Macdonald-Blair project could conceivably remain a stranger in our midst due to a lack of local contact.

While we can only express disappointment at the present situation, we feel certain that an early settlement of this situation can only be beneficial to the future of the Blair Farm project.

I would like to thank you for allowing us the space to better clarify these several points concerning the present state of affairs at the Blair Farm.

Wayne McKell,
President
Chateaugay Valley Historical Society.

Author's Note

In replying to Mr. McKell's comments about my article concerning the late Roy Blair in the December-January issue of the "Macdonald Journal" I should point out I was not well informed of Mr. Blair's interest and support of the Chateaugay Valley Historical Society during his lifetime. My article was based entirely on my memory of the man and the interests he communicated to me prior to his involvement with the Society. These were naturally stressed in the article and I see no cause for resentment or reaction from the Historical Society because I did not write into the article any comments about the good work done by the Society on the estate. The other matters raised by Mr. McKell's letter will be dealt with in due course as the more essential needs of the estate are met. The first priorities for the Blair Farm were to eliminate the vandalism and destruction of property that was going on; to repair Blair House and to find a suitable superintendent-caretaker to be in residence and oversee the development of the farm. These three matters have now been satisfactorily settled so further projects can now be developed. This will, of course, include the selection and convening of an Advisory Board for the property.

A. R. C. Jones
Woodland Resources
Department of Renewable
Resources.

Double Issue

Over the years I have seldom missed a Journal. May I compliment everyone on the excellent two-in-one issue for the months of December and January.

From the first page with "Journal Jottings" to "This Month with the QWI" every article is so clearly written that one has no difficulty in visualizing the writer's thoughts.

Mr. J. B. Roy is to be commended on his two articles in this issue in which he has detailed so much important information.

Congratulations to you all. Keep up the good work.

(Mrs.) Alice G. Muir,
Ste. Anastasie, P.Q.

Just a note to tell you how much I enjoyed the double issue. As someone who had never thought much of the natural food "faddists", I am glad to see that the Macdonald staff are now prepared to study their theories scientifically.

O. R. Evans,
Montreal, P.Q.

"An Alternative Approach to Agriculture" was of special interest to me as I have changed my eating habits in the last five years and I feel better than I did 10 years ago.

The time has come for Macdonald College to show this part of the country, at least, how good food can be grown. I shall follow with interest what they do about it.

(Mrs.) F. Crawford,
Howick, P.Q.

The Family

Farm

Published in the interests
of the farmers of the province
by the Quebec Department of
Agriculture.

ALFALFA, THE QUEEN OF THE FORAGE PLANTS

by J. B. Roy,
Information Division

Alfalfa, which has been called "the queen of forage plants", is grown in every part of the province of Quebec where a serious effort has been made to introduce it. In 1973, with the object of getting alfalfa fields established in all the agricultural regions and improving forage quality, the Quebec Department of Agriculture launched a promotional campaign called "Operation Alfalfa". This campaign was one of the essential features of the agricultural department's feed and food self-supply program for Quebec. Thanks to the campaign, which includes regional alfalfa-growing competitions and the annual naming of a "Provincial Alfalfa King", the area devoted to this legume rose from 325,000 acres in 1973 to nearly 500,000 in 1975.

The winner of Operation Alfalfa in 1975, Mr. Réal Lambert of Saint-Valérien in Shefford County, attributes much of his success to the careful preparation of his land and generous applications of fertilizer which gave him three cuts of alfalfa. He says that alfalfa is indispensable for any Quebec farmer who wants to reduce his production costs.

Alfalfa deserves a special place in any dairy farming enterprise. It is well suited to the soils and climate of Quebec and has high feeding value. It is productive and persistent, fits well into the operating system of our dairy

farms, and can be used in a number of ways.

Characteristics of Alfalfa

Alfalfa is a perennial legume with a tap root that may go down as far as 25 feet in deep, well-drained soils. It can fix atmospheric nitrogen by means of symbiotic soil bacteria which make nodules on its roots and multiply in them.

It is particularly well suited to soils that have a high calcium content or are almost neutral. It needs well-drained land and cannot endure water-logged soil for longer than two weeks. On the other hand, it withstands without difficulty our highest summer temperatures and the periods of drought that sometimes occur in one region or another of Quebec. Thanks to its root system, an alfalfa plant can draw upon a large volume of soil for the moisture and minerals it needs to grow.

Among forage plants, alfalfa is the richest in nutrients, especially protein. The protein content of dry alfalfa hay may be as high as 17 per cent or even 20 per cent. Alfalfa also has high digestibility, and it can yield up to four, five, six or more tons of hay per acre.

Alfalfa produces a plentiful aftermath and may thus yield a number of cuts. It is very persistent. Unlike varieties of red clover, it may last and give abundant

harvests year after year. It lends itself to a wide range of uses and types of operation, may be used for hay, silage, zero grazing or — when dehydrated — as a concentrate, and may be fed on the farm or exported. For dairy cows it is unrivalled. One wonders whether we shall continue to grow red clover.

Soil and Preparation of Land for Alfalfa

For alfalfa to become well established and produce high yields for a number of years, the land must be well prepared, fertile or well fertilized, and deep and permeable so that the plant's root system can grow fast and deep.

Drainage

Alfalfa cannot tolerate poorly drained land. Its roots require a medium which, in addition to containing plant nutrient elements, is also well aerated. The air in the soil is essential to the life of the bacteria that live on the roots and use atmospheric nitrogen to grow and develop. In poorly drained soil, water fills all the empty spaces and drives out the air.

Surface drainage, allowing fast removal of surface water, is of prime importance — hence the need for well-made lands without any hollows on them.

In the case of heavy land which is hard to drain well, ditching or sub-drainage should be resorted to. Imperfect drainage will shorten the life of an alfalfa field.

Preparation of the Land

Because of the small size of alfalfa seed and the nature of this plant's root system, the land must be well prepared so that the soil is finely crumbled on top and in good tilth below.

Good results are obtained on land that was ploughed in the fall. In the case of heavy soils, the surface layer is not tilled too finely, otherwise the seedbed may lack firmness at seed-time.

The preparation of the land must be carried out carefully and painstakingly in order to ensure a good catch of alfalfa and several years of production.

Liming and pH

Soil analysis is helpful in deciding how much lime to apply to obtain a pH of 6.5 to 7.0. The 6.5 minimum must be respected. If a lot of lime is needed to raise the soil pH to 6.5 or 7.0, it should be spread in two applications — half before ploughing and half after. Following spreading, the lime should be worked into the plough layer by harrowings.

It is better to apply lime early in the fall to give it a chance to react with the soil and start to counteract the acidity before seed-time.

Fertilization of the Soil

If alfalfa is to persist and produce big yields, its phosphorus and potash requirements must be met. It is particularly sensitive to lack of potassium. A serious shortage of this element reduces the productivity and considerably

curtails the life of an alfalfa field.

It is advisable to have the soil analyzed and then fertilize it according to the recommendations. In lieu of a soil analysis, the procedure outlined below may be followed in the year of seeding.

Basic fertilization for poor soil consists in applying to the land, at the time of ploughing, the elements it lacks in the form of fertilizer, and then working them into it. The fertilizer is applied broadcast a few days or weeks before the fall ploughing.

This basic fertilization is with phosphorus and potash only and calls for the application of 40 to 60 pounds of P_2O_5 and 40 to 90 pounds of K_2O per acre. In practice, 300 pounds per acre of 0-15-30 or 0-20-20 may be applied.

Fertilization at seed-time The purpose of this application is to place fertilizer fairly accurately where it will be available to the roots of the alfalfa seedlings, thereby assuring them of a vigorous start. It is not intended to replace basic fertilization. It merely supplements it.

The fertilization at seed-time consists in applying 15 to 30

pounds of nitrogen, 60 to 80 pounds of P_2O_5 , and 60 to 90 pounds of K_2O per acre or, in practice, about 400 pounds of 5-20-20 per acre.

End-of-season fertilization At the end of the season, immediately before the pastures are given their autumn rest (i.e., about September 1) and especially if a nurse crop has been used, 60 to 120 pounds of K_2O (100 to 200 pounds of muriate of potash) are broadcast per acre to provide the young plants with the potassium they need to withstand adverse conditions between the end of autumn and the beginning of spring.

Seeding

When seeding alfalfa, the following points should be borne in mind:

Choice of variety Pedigreed seed should be used because it guarantees trueness to variety, good germination, and freedom from dangerous weeds and other impurities. The variety should be one of those recommended by the Quebec Plant Productions Council. A list of these varieties with their main characteristics follows.

Varieties of Alfalfa Recommended by the Quebec Plant Productions Council

Name	Maturity	Average duration	Resistance to wilt	Adaptation
Saranac	early	3-5 years	resistant	all zones
Thor	early	2-3 years	resistant	all zones
Warrior	mid-season	3-5 years	moderately resistant	all zones
Iroquois	late	3-5 years	resistant	all zones
Vernal	late	3-5 years	resistant	all zones
Titan	late	3-5 years	resistant	all zones
520	late	3-5 years	resistant	all zones

Roughly speaking, the foregoing list offers a choice between late but generally long-lived varieties (e.g. Vernal and Titan) and earlier ones (e.g. Saranac and Thor) which usually do not last as long. The latter will give a bigger yield, especially under highly fertile conditions and they are earlier and very vigorous when establishing themselves. Warrior may be considered as intermediate; it lasts longer than Thor but its yield is a bit lower.

Inoculation Alfalfa seed should always be inoculated regardless of whether the field has been sown to legumes before or not. The purpose of inoculation is to provide the alfalfa plants with the *Rhizobium* bacteria whose activities they are dependent upon to fix the nitrogen contained in the air in the soil. The seed must be inoculated immediately before being sown. This operation is carried out in a cool place not exposed to direct sunlight, to prevent the bacteria from drying out.

The important thing to remember when using inoculants is to check the expiry date on the container, store them in a cool place, and avoid exposing them to sunlight before use. Reasonably detailed instructions are given on the container. Following inoculation, the seed must never be exposed to the sun and must be sown as soon as possible.

Establishment

Time to seed The seeding date may vary according to the region but, in general, alfalfa is sown

as early as possible in spring to give the plants time to develop properly and become well established before winter. Thus, alfalfa seedlings are at risk if they are sown after midsummer.

Seeding In Quebec alfalfa is usually sown with a nurse crop (oats, barley, or wheat). The cereal variety chosen should be early and strong-strawed. The use of a nurse crop has its advantages and disadvantages.

Another method, which is becoming increasingly widespread and should be encouraged, is to sow alfalfa without a nurse crop. Sown in this way, alfalfa takes root much better and with less risk and, even in the year of seeding, may yield one or two cuts that are often more valuable than a grain crop.

Without a nurse crop, alfalfa may be sown either as a pure stand or in a mixture. It is usually sown with a grain drill but anybody who has to sow a large acreage of alfalfa should consider using a forage seed press drill. With this type of seeder, the seed can be placed at the desired depth and the soil made firm, thus making for better germination. If a grain drill is used, it is recommended that the field be rolled immediately after seeding.

Under growing conditions where alfalfa has already been tried successfully, the ideal way to get it established is in a pure stand. This is conducive to better crop management because it permits the use of Eptom herbicide before seeding to control weeds.

In pure stand, alfalfa is sown at the rate of 10 to 12 pounds per acre. Some growers use a higher seeding rate but tests carried out in Quebec showed that the number of plants obtained was practically the same whether 10, 15, or even 20 pounds per acre were sown. The amount of alfalfa hay produced in the seeding year was not affected by higher seeding rates.

Nevertheless, seeding in mixture is still the commonest way of sowing alfalfa. It has of course the drawback of making weed control in the seed bed more difficult, but where alfalfa is being grown for the first time or in fields where only limited success has been obtained, the seeding of alfalfa in a mixture is to be recommended.

The main advantage of a mixture is that another kind (or other kinds) of good quality forage plants can establish themselves in spaces which would otherwise be left to weeds.

To give the other kind of forage plants sown in the mixture a chance to establish themselves, the seeding rate of the alfalfa in the mixture is reduced to eight pounds per acre. This rate is high enough to give a good stand of alfalfa under favourable conditions.

The mixtures recommended for silage and haylage are as follows:

Alfalfa 8 pounds — brome 10 pounds

Alfalfa 8 pounds — timothy 6 pounds

Weed Control in the Seeding Year

Weeds are often a cause of failure to get a pure stand of alfalfa established. To control weeds at this stage, it is necessary in most cases to follow the procedure described below.

1. Choose a clean field free from herbicide residues or, if it is weedy, clean it up during the summer or fall of the year before seeding with a herbicide treatment (Cytrol, Amitrole, or Dalapon).
2. Harrow in a pre-seeding application of EPTAM (EPTC).
3. Apply 2-4-DB when the alfalfa has two to four three-lobed leaves and the weeds are not more than two inches high.
4. Make an application of KERB-50W (pronamide) in the fall if couch grass is getting a footing in the field.

Each of the above four steps is equally important. To neglect one would greatly reduce the chances of success.

The Fall Rest Period

The alfalfa field should be left undisturbed from the end of August to mid-October. This rest period allows the plants to build up the reserves they need to face the cold, survive the winter, and get off to a good start the following spring. The amount of reserves they accumulate depends on the quantity of foliage they have, which explains why the field is not cut during that period.

The cut immediately preceding this rest period is made high. The maintenance fertilization is then applied. After the rest period, if the aftermath is plentiful, the field may be cut for silage or zero grazing.

Systems of Alfalfa Management

In order to persist and yield well, alfalfa must be carefully managed from the seeding year onwards.

Seeding year If alfalfa has been sown with a nurse crop, the grain is preferably cut green (especially if it has been lodged or grown too luxuriantly) to give the legume a chance to get properly established.

If the alfalfa has been grown without a nurse crop, a first cut is made when it begins to flower. A second cut is made before or after the fall rest period depending on the state of growth.

Later years Three cuts are taken from an alfalfa field in good condition in some regions of Quebec, especially in the south-western part of the province, and two cuts in the others. The alfalfa is cut as soon as it begins to flower, i.e., when the very first flowers appear. In this way, the maximum TDN per acre is obtained. The cuts are made before September, although the last one may be made after the fall rest period — about mid-October.

In the case of an alfalfa field in poor condition owing to partial damage from winter injury, the

first cut is delayed until full flowering so that the injured plants (crowns and roots) will have time to heal and to accumulate ample reserves. If this is done, the aftermath will be denser. An early cutting would weaken the injured plants even more and this would help to reduce subsequent yields and thin out the stand.

Stage of growth To decide when to cut alfalfa, one should pay more attention to the stage of growth than to the date. For this purpose, the calendar is a poor guide because the growth of the plants varies greatly from year to year under the influence of weather conditions. For example, in the region of St-Hyacinthe, alfalfa will be in the bud stage on July 15 of one year and in full bloom on that date in another year. If one makes a habit of starting cutting year after year in mid-June, there will be considerable variations in yield, quality of the forage, amount of aftermath, etc.

Alfalfa used to be cut when it was in full bloom. Cutting at that stage favoured biggest yields and long survival of the stand but left out one important consideration — the quality of the harvested forage. In other words, the longer cutting is delayed, the higher the yield but the more the quality of the forage diminishes. As the tops of the plants mature, the amount of fibre in them increases while digestibility and protein content decrease.

Food Reserves in the Plant

In order to understand the behaviour of alfalfa under different management conditions, it is necessary to know about the sequence of plant food reserves in the roots.

The plant may be compared to a factory. By means of its leaves, it makes the substances it needs in order to grow. From the soil, it obtains water and minerals. When the plant starts to grow in spring, it has not got any leaves and so cannot make for itself the substances it requires for growth. In order to produce foliage, it therefore has to draw upon the food reserves stored in its roots during the previous fall. The plant continues to draw upon its reserves in this way until its top is about eight to 10 inches high. This is the period of utilization.

By this time the foliage is fairly well developed and the plant is making more food reserves than it is using. The surplus thus passes into the roots for storage and the reserves increase. This is the period of accumulation. The reserves are at their maximum when the plants are in full bloom.

The sequence occurs not only in spring but each time the alfalfa is cut. By removing the tops of the plants, one closes down the factory so to speak and the plant has to fall back on its reserves to make new foliage. When the foliage is once more plentiful, manufacture again exceeds consumption.

The reserves are at their lowest about three weeks after growth starts in spring and about three weeks after the alfalfa has been cut. To cut the tops when reserves are low weakens the plants so that they are slow to grow again. Too many cuts exhaust the plants. The reserves thus play an important role in the life of alfalfa and are the key to yield, vigour, and duration.

Conclusions

Alfalfa is the most valued of forage plants for its feed value and one which can be introduced into the rations of all livestock, especially cattle. There are no insoluble obstacles to growing it in Quebec.

Preparation of the soil calls for care and meticulousness. In order to persist and produce, this legume needs precise management in the seeding year. Since its requirements are known, dairy farmers ought not to turn their backs on growing it. Its cultivation in Quebec is unfortunately not yet sufficiently widespread notwithstanding recent progress.



Happy birthday! Mrs. Cameron Dow celebrated her 90th birthday on February 28. Mrs. Dow is pictured here with the Bonaventure County Executive.

Seminar — 1975

"FWIC — What Could It Be? What Should It Be?" was the theme of Seminar 1975, which Miss Edna Smith and I attended as QWI representatives.

Mrs. John McLean, FWIC President, welcomed the board members from across Canada gathered in Ottawa during the first week in December. Mrs. McLean paid special tribute to our late President, Mrs. Edyth Westover. Miss Brenda Gorman, Supervisor of Home Economics, Nova Scotia Department of Agriculture and Marketing, worked with us as animator throughout the Seminar, taking as her directives, "A Closer Look at You, Your Organization, and Your Country."

Resource persons were of high calibre and presented their topics in a most interesting manner. We heard Mrs. Beryl Plumptre, Vice-Chairman of the Anti-Inflation

Board and immediate Past President of the Prices Review Board, speak on "Her Views" covering consumer prices and anti-inflation control, and suggesting that FWIC support a national nutrition program. Dr. Gordon MacEachern, President, Agricultural Economics Research Council of Canada, spoke on "Rural Development and the Quality of Life." Simma Holt, M.P. and Coline Campbell, M.P., took as their subjects — (a) The concerns of rural Canada, (b) How a voluntary organization like FWIC can have a more effective influence, and (c) How government and political people can provide leadership to citizen organizations. David Macdonald, M. P. gave a presentation on "The Social Conscience of FWIC", and Gerald Steele, Executive Director, of the Canadian Council on Rural Development, spoke on "FWIC and Rural Development." The speakers, each in his or her own way, pointed out the great potential of FWIC in having people

become aware of what is happening in society, followed by action. The local level is the place to start and constructive change is achieved by people working in small groups.

Group discussion brought out the vital issues with which FWIC should be concerned and how to implement action from individual involvement, making resolutions, suggestions to provincial units, guidelines, committees at Federal level, lobbying, and working topics into programs.

We were privileged to hear Mrs. Marion Alexander, the Grace Frysinger awardee, tell of her experience as guest of "The National Farm and Garden Association — U.S.A." In her own humorous fashion, she told of her trip across the U.S., the educational value, the many pleasures and the friends she made on her way, giving us a most interesting word picture.

An unexpected pleasure was the presentation of slides and commentary on "Safari to Kenya" by Mrs. J. McLean and Mrs. B. Noblitt. This trip was offered to them, expense-free, by a Toronto Travel Agency, as a preview to the ACWW Conference in 1977. Board members were most appreciative of the information they gained on the Conference Centre, the lodgings available, and the countryside they may expect to see in Kenya in 1977.

For two days we really took a look at ourselves as members of FWIC and at the organization, and we also had an excellent opportunity to speak with qualified resource people. Board members

were requested to evaluate the Seminar, keeping in mind how the FWIC machinery can work and making suggestions to the Executive with a view to awareness, action, and feasibility. Direction for the future was given much thought and discussion and we trust that a much stronger organization will emerge.

A Board Meeting followed the Seminar to consider the proposed new By-laws. After due discussion, the By-laws were accepted and Mrs. McLean expressed the hope that, having made a decision, FWIC would have a structure on which to build more effectively and functionally.

Estelle A. Coates
1st Vice President, QWI.

Preserving the Past

Over the years the Women's Institutes have been taking part in the Tweedsmuir Contests and several have won the Tweedsmuir Prize. Many became interested in collecting their town's history. It is never too soon to research the areas of the past; in many cases time has been too long.

Many Institutes are now active in organizing museums whereby the era of the past may be shown to the coming generations. Members, too, learn while working on these projects. Archives in these museums and universities have places where the "Story of the Past" may be put for safe-keeping. The Tweedsmuir History, histories that did not win prizes, the story of a Women's Institute project, or a collection of pictures of your community may be placed

in these archives for safekeeping.

Women's Institute members prepare material of historical significance and offer it to their Historical Societies. Others search out objects of historical value to place in museums.

Mrs. G. French
Provincial Citizenship Convener.

Mincemeat Squares

- 1/2 cup margarine
- 1 cup brown sugar
- 1 cup mincemeat
- 2 eggs
- 1 teaspoon rum flavouring
- 1/2 cup flour
- 1/2 teaspoon salt
- 1/2 teaspoon baking powder
- 1/2 cup chopped nuts

Cream margarine and sugar. Blend in mincemeat, eggs, and flavouring. Combine dry ingredients and mix well with mincemeat mixture. Stir in nuts. Pour into greased and floured pan (13" x 9"). Bake 40 to 45 minutes in a 350°F. oven. When cool ice with **Butter Icing**; and cut into squares.

Butter Icing: 1/3 cup butter or margarine, 2 cups icing sugar, 1 tablespoon milk. Blend well.

Dear Fellow Publicity Conveners

The aims and objectives of the WI are being fulfilled at all levels, but are we giving them adequate publicity? Do we think about what should be publicized and, most important of all, who will read it and what their reaction will be?

Your first consideration is to your Branch or County: you owe it to them to make the best possible use of the space you have for news or achievements. Second, there are the other WI members who read about you for general interest and new ideas. Perhaps something you do will inspire another group. Third, you have a majority of readers who are not members and they form their impressions, good or bad, of WI activities from what you write. One small reminder — some of those readers may be potential members. Are we making sure that our publicity might just encourage someone to learn more about us and perhaps join?

Publicity for our local newspapers may be news of our latest meeting and its highlights. An event of special interest to your community is also a must for publication. Your local editor can give you some ideas of what he/she would like to have. Most branches have excellent publicity in their local newspapers — keep it up.

News coverage for the Macdonald Journal is no less important. We have the unique opportunity of getting to know each other across the province, of keeping up with WI doings, and informing thousands of other readers of our activities. We have a wonderful chance here of improving our image as well as informing, instructing, and entertaining our sister branches. This is where our "specials" can come in. I am not suggesting we should try to be slick, professional reporters. We should be ourselves, but what we should look for is the special happening, a major event.

something unusual, a tribute to a member, something that is different from the routine WI commitments.

Have you done something new this year? If you reported a fair, an annual tea or banquet last year, why not give it a miss this year and tell our readers about something else. If you sent a County special last year, how about something from each branch this time or vice versa.

We have suggested months for County specials but if you have an activity in the spring and that is your "special", write us about it immediately — don't wait till November, which might be your "Month", as it is old news by then. We don't mind having two specials from you — that is better than out-of-date news.

I like to have your regular reports each month as well as the specials — as much as possible your activities will be covered. You will understand that if several of you report doing the same thing — card party, picnic, quilt, etc. — we can't mention every name — nor does it make interesting reading to mention the same things every month, but we do try and mention all your activities without making it repetitious.

If I can help in any way, please feel free to write to me. If you have several ideas for specials, perhaps I could help you choose or outline one. We want to make the best use of our WI pages.

We are pretty special as an

organization — so let's blow our own horns!

Mrs. James Robertson, QWI
Publicity,
in conjunction with
Miss Hazel Clarke,
Macdonald Journal.

Dear WI Members

We are well into 1976 now and everyone is busy with plans for the year. Program and nominating committees have been appointed and suggestions made for programs; 50th Anniversaries, outings to the Ice Follies and other places are in the planning stages.

Winter is a good time to learn how to have better gardens. **Frontier** WI learned how to sterilize soil for potting plants — place soil in a shallow pan in a 350° F. oven. Put a small potato on top and when the potato is cooked, the soil is ready. Another group learned how to care for roses and dahlia roots. To grow dahlias successfully, each separate portion of root must retain a sliver of the original stem trunk attached. Root clumps should be dried upside down to allow moisture to drain out through the stem. Tulips, planted in pots and forced for early blooming, were given to shut-ins, a bright spot of colour on those cold days. Growing house plants and conservation of good farmland were two interesting talks heard.

A display of macramé articles and a demonstration of this 2000-year-old Arab art was enjoyed by

Dalesville-Louisa members. A scrapbook of items, pictures, and poems of the branch's activities since its beginning is being made by one of their members. She read a poem, which she had composed, on the forming of the branch.

Mrs. MacDonald displayed Indian arts and crafts and gave a demonstration of same at a recent **Matagami** WI meeting.

We have been hearing so much about the neglect of our aged these days that it is a nice change to hear about the January meeting at **Lennoxville** where grandmothers were honoured. Two poems, "Grandmas Have Changed" and "Beloved Grandson" were read, and the Roll Call was answered by giving the birthplace of grandmothers and great-grandmothers. Ancestors came from Normandy, the British Isles, France, and Holland. Two members traced their families to the first settlement at New Amsterdam (now New York) in the early 17th century. Pictures of grandmothers and grandchildren had been brought in by members and an interesting and fun contest was held matching kith and kin with prizes going to the two who matched the most pictures. Each grandmother present received a dish towel as a gift from the President.

Canadian winters are not always the easiest to get through, especially winters like this past one, and so it is interesting to see how we cope. Some go to Florida or the southern states. That is fine if you spend all the cold months away, but for those who have a few weeks and then return

to — 30° it isn't so pleasant! Some of us stay and make the best of it! There is skating on rinks that the members support. Cross country skiing is very popular and besides being good exercise one has the chance of enjoying the quiet and peaceful countryside and wooded areas. One WI held an old-fashioned sleigh ride with horses, bells, hay, and even moonlight. One older lady talking about sleigh rides to me said, "There was a certain magic about the shadows in the moonlight, the jingle of the horses' bells and squeak of the runners on the crisp snow that I miss now with cars, clear roads, and modern-day noise."

A film on pioneer life, crafts, and farming was enjoyed by some members. The "action" was filmed in and around Upper Canada Village — early candle, soap, and dye making and the complete process of shearing, cleaning, carding, and spinning wool were some of the crafts demonstrated.

Mrs. Williams, the President of **Missisquoi County**, showed slides on articles for the 1976 Expo Quebec Handicraft competition with details of seam finishing, button holes, etc. These slides are available to any branch that is interested.

Stanbridge East WI heard a review of a book "Family Happenings in Missisquoi County" which was written by Mrs. Ruby Moore, one of their members. This branch also heard Mr. Ch. Bockus speak on the Canadian Legion. The Legion not only supports veterans and their families but also helps with youth sports and supplies

wheel chairs, beds, and crutches for the aged and others in need.

We extend our sympathies to the family of Miss Lillian Palmer from **Bury** who died in January. Miss Palmer had held positions in both branch and County and had been recording Secretary at past Macdonald conventions. The branch gave a donation in her memory to the Pope Memorial Student Fund.

Many report giving donations to various organizations and memorial funds in memory of Mrs. Westover.

East Angus presented 25-year pins to Mrs. Welles Coates and Mrs. Murray Labonte. A useful hint on how coffee can be kept for future use if frozen was passed along by the Home Economics convener.

The Home Economics convener in **Sawyerville** spoke on the value of potatoes as a food and gave 25 useful sugar-saving tips.

Used stamps have been collected for leprosy missions and the Red Cross.

Several groups have heard speakers on local community centres — it is necessary to voice needs now in order to get the programs started.

News is still coming in about activities that took place during the mail strike. **Stanbridge East** sent three large boxes to the Unitarian Relief program and two boxes of toys to a school for children being taught according to their capabilities in St. Jean. A St. John Ambulance course

was completed by five members of the **Richmond Young Women's** WI. This is a very practical and useful course as I have found. This winter one of our sons came in one very cold day from working in the bush and found he had two toes frozen. Remembering my course, we got his foot into a warm tub of water (100°F-108° F) and were relieved to see normal colour in his toes again in about 20 minutes.

An interesting talk was heard at **Ascot's** last meeting when Mrs. Lorne Thomson, Adviser to North Shore students of the Alexander Galt Regional School in Sherbrooke County, spoke of life on the North Shore and the problems confronting the students when entering an entirely new lifestyle on coming to the Eastern Townships. Mrs. Thomson has been in this work for six years and says the North Shore students have a great potential for learning.

Community improvement is a normal interest of WI members. **Megantic** ladies have been petitioning for new lights for a badly lit area of their village. **Valcartier** donated \$200 towards their Community Centre for sports and another group support a "Meals on Wheels" program in their town.

A few Roll Calls: Exchanging supper dish or "quickie" meal recipes; hints on how to keep from growing old; ways to make the most of our food dollar; safety rules to help prevent crime directed towards ourselves or our personal effects.

Mrs. James Robertson
QWI Publicity

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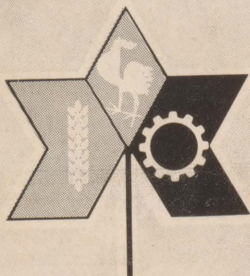
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